



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,331	10/31/2003	Reid C. Danielson	17310-298007	9674
25764	7590	06/28/2005	EXAMINER	
FAEGRE & BENSON LLP PATENT DOCKETING 2200 WELLS FARGO CENTER MINNEAPOLIS, MN 55402			WATKO, JULIE ANNE	
			ART UNIT	PAPER NUMBER
			2653	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/698,331	DANIELSON ET AL.
	Examiner	Art Unit
	Julie Anne Watko	2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 June 2005.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) 4-7, 14-21 and 23-26 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3, 8-13 and 22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 10/31/2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation “the overlapped portion of the head suspension comprises a portion of the base plate such that the base plate is contacted directly by the overlapped portion” in lines 2-4. Because the base plate is part of the overlapped portion, it is unclear in what sense the overlapped portion directly contacts itself.

Claim 10 is rejected as indefinite by virtue of its dependency from indefinite claim 9.

### ***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 8-13 and 22 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Berding (US Pat. No. 5936803).

As recited in independent claim 1, Berding shows a head suspension for supporting a head slider over a disk surface in a rigid disk drive (see Fig. 1), the head suspension including a load beam 120 having a mounting region (right region in Fig. 4), a rigid region (left region in Fig. 4) and a spring region 122 located between the mounting region and the rigid region, the head suspension comprising a shock limiter (including 166) limiting movement of the head suspension away from the disk surface ("“tabs” or “limiters” 166 that contact the base plate 110 and mechanically limit the movement of the load beam 120 in a direction away from the disk ”, see col. 6, lines 63-67) due to impact loading.

Regarding the limitation “having a majority of the length of the limiter formed within the spring region of the load beam” in claim 1, lines 5-6: When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000)* (The disclosure gave no indication that the drawings were drawn to scale. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."). See also MPEP § 2125. Thus, the drawings of Berding are not evidence of the existence of any difference between the apparatus of Berding and the claimed apparatus.

Even if Berding’s apparatus in fact differed from Applicant’s claim, absent any showing of unexpected results due to the claimed dimensions, and absent any showing that the claimed dimensions were outside the level of ordinary skill in the art at the time Applicant’s disclosure was made, and absent any showing that the claimed device would perform differently from the

known device, a mere dimensional change in a known apparatus would not patentably distinguish over the known prior art. See Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984). See also MPEP § 2144.04(IV).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed relative dimensions of the suspension of Berding in the course of routine experimentation and optimization as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to vary the length of the spring region in order to experiment with and optimize a spring response of the load beam as is notoriously well known in the art.

As recited in independent claim 11, in addition to the above teachings, Berding shows the load beam 120 comprising a single piece of material (“thin sheet of stainless steel”, see col. 7, lines 1-3).

As recited in claim 3 and independent claim 11, the shock limiter adapted to contact a portion 110 of the head suspension upon movement of the head suspension relative to the disk surface due to impact loading (see col. 6, lines 63-67).

As recited in claims 8, 10 and independent claim 22, in addition to the above teachings, Berding shows the shock limiter including at least one bend (see 165 in Fig. 3) creating an overlap (see 166 in Fig. 4) with a portion 110 of the head suspension.

As recited in claims 2 and 13, Berding shows that the spring region includes an opening 116 and wherein the shock limiter comprises a cantilevered portion 165 formed within the opening.

As recited in claim 9, to the extent understood, Berding shows that the head suspension includes a base plate 110 attached to the load beam at the mounting region, and the overlapped portion of the head suspension comprises a portion of the base plate such that the base plate 110 is contacted directly by the overlapped portion (see Fig. 4, which shows that a load beam layer directly contacts the base plate) when the shock limiter is limiting movement of the head suspension away from the disk surface due to impact loading.

***Response to Arguments***

6. Applicant's arguments filed June 21, 2005, have been fully considered but they are not persuasive.

Regarding the independent claims: On page 7, 4<sup>th</sup> and 5<sup>th</sup> paragraphs, Applicant argues that "While the shock limiter of Berding starts at the spring region, the majority of the length of the shock limiter of Berding is within the mounting region. ... The majority of the balancing member 160 is outside the spring region, being located towards the mounting region side of pivot axis "A." Applicants' shock limiter has a majority of its length within the spring region, with only a proximal end 472 located outside the spring region to contact the base plate 422."

The Examiner has considered this argument thoroughly and asserts that the figures of Berding, which are not to scale, are not evidence of any difference between the claimed device and the prior art device; however, even if the relative dimensions were different, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Because the claimed dimension is not critical, and because the claimed dimension was within the level of ordinary skill in the art, the claim is not patentable over the prior art of record.

Regarding indefinite claim 9, to the extent understood: On page 8, 1<sup>st</sup> paragraph, Applicant argues that “the shock limiter of Berding … contacts the load beam layer, and does not contact the base plate directly.” The Examiner has considered this argument thoroughly and agrees that the shock limiter of Berding contacts the load beam layer, and does not contact the base plate directly. Claim 9 is silent regarding direct contact between a shock limiter and a base plate. Because the overlapped load beam layer of Berding directly contacts the base plate (see Fig. 4), the Examiner believes that the limitation “the base plate is contacted directly by the overlapped portion” in claim 9, lines 3-4 (to the extent understood), is met by the reference.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

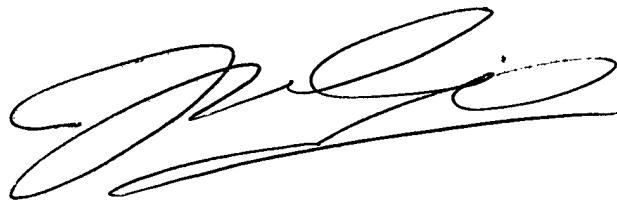
8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on Tue & Thu until 5, Wed until 3:30, Mon & Fri late.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Julie Anne Watko  
Primary Examiner  
Art Unit 2653

June 25, 2005  
JAW

A handwritten signature in black ink, appearing to read "Julie Anne Watko".